

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows. The claims are in the format as required by 35 C.F.R. § 1.121.

1-18. (Cancelled).

19. (Previously Presented) A computer-readable medium carrying computer-executable instructions for modeling an operating parameter for a store, comprising:
code for collecting transaction data containing quantities of a plurality of items;
code for changing row order of the transaction data so that all records for each item are in contiguous rows;
code for constructing quantity and price timeseries for each of the plurality of items;
code for generating a first matrix of correlation factors utilizing the quantity and price timeseries;
code for identifying top positive and negative correlated items via the first matrix;
code for generating a second matrix of weighing factors in which the weighing factors of the top positive and negative correlated items have non-zero values and the weighing factors of all other items are assigned a value of zero; and
code for calculating the operating parameter utilizing the second matrix of weighing factors.

20. (New) The computer-readable medium of claim 19, wherein the operating parameter corresponds to a demand, a revenue, or a profit associated with the plurality of items.

21. (New) The computer-readable medium of claim 19, wherein at least two of the plurality of items belong to different categories.

22. (New) The computer-readable medium of claim 21, wherein the plurality of items correspond to retail products being sold within the store, the retail products being divided into the different categories.
23. (New) The computer-readable medium of claim 19, further comprising:
code for predicting a demand on quantity for each of the plurality of items.
24. (New) The computer-readable medium of claim 23, further comprising:
code for determining an effect of a price change on the demand on quantity.
25. (New) The computer-readable medium of claim 23, further comprising:
code for determining correlations between one or more variables and the demand on quantity.
26. (New) The computer-readable medium of claim 25, wherein the one or more variables include externalities, lag-demand-terms, and global-price-terms.
27. (New) A computer system for modeling an operating parameter for a store, comprising:
 - a database for storing transaction data associated with a plurality of items corresponding to a plurality of retail products being sold within the store; and
 - a computer-readable medium carrying program instructions for modeling the operating parameter for the store, the program instructions executable to:
 - collect transaction data containing quantities of the plurality of items;
 - change row order of the transaction data so that all records for each item are in contiguous rows;
 - construct quantity and price timeseries for each of the plurality of items;
 - generate a first matrix of correlation factors utilizing the quantity and price timeseries;
 - identify top positive and negative correlated items via the first matrix;

generate a second matrix of weighing factors in which the weighing factors of the top positive and negative correlated items have non-zero values and the weighing factors of all other items are assigned a value of zero; and
calculate the operating parameter utilizing the second matrix of weighing factors.

28. (New) The computer system of claim 27, wherein the operating parameter corresponds to a demand, a revenue, or a profit associated with the plurality of items.

29. (New) The computer system of claim 27, wherein at least two of the plurality of items belong to different categories.

30. (New) The computer system of claim 27, wherein the program instructions further executable to predict a demand on quantity for each of the plurality of items.

31. (New) The computer system of claim 30, wherein the program instructions further executable to determine an effect of a price change on the demand on quantity.

32. (New) The computer system of claim 30, wherein the program instructions further executable to determine correlations between one or more variables and the demand on quantity.

33. (New) The computer system of claim 30, wherein the one or more variables include externalities, lag-demand-terms, and global-price-terms.